

What is claimed is:

[Claim 1] A method for generating drawings for a disc diffuser based aeration system within a round tank and coordinating said drawings with a master database and rule set based on input to a simple dialog box, the method comprising:

- a) providing a computer system;
- b) generating aeration system drawings and associated data for the aeration system pipe network with the computer system;
- c) automatically selecting a typically aerated zone within the tank in which to locate the aeration system;
- d) automatically selecting the quantity of aerators per header pipe;
- e) automatically determining the spacing of diffusers and accessories such as support stands and expansion joints on the said headers;
- f) automatically determining length of headers of varying lengths based on the tank layout;
- g) automatically providing a materials take-off in a table thereby selecting raw materials necessary for fabricating the aeration system.

[Claim 2] The method of claim 1 wherein the aeration system is a tube diffuser based aeration system.

[Claim 3] The method of claim 1 wherein the aeration systems is a panel diffuser based aeration system.

[Claim 4] The method of claim 1 wherein the aeration system is placed within a square or rectangular tank.

[Claim 5] The method of claim 1 wherein the aeration system is placed within a carousel tank.